

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 00-713-i16)



1656
PATENT

#6/18
1/14/02

TECH CENTER 1600/2900

JUN 18 2002

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In the Application of:

Mirkin et al

Serial No. 09/976,601

Filed: October 12, 2001

For: Nanoparticles Having Oligonucleotides
Attached Thereto and Uses Therefor

Examiner: J. Riley

Group Art Unit: 1656

Confirmation No.: 4367

U.S. Patent and Trademark Office
Box Sequence, P.O. Box 2327
Arlington, VA 22202

Sir:

TRANSMITTAL LETTER

In regard to the above identified application:

1. We are transmitting herewith the attached
 - a. Response to Notice to Comply dated May 21, 2002
 - b. Copy of the Notice to Comply
 - c. Substitute Sequence Listing (paper copy and computer readable form on 3.5" diskette)
 - d. Return Receipt Postcard
2. With respect to additional fees:
☒ A. No additional fee is required.
☐ B. Attached is a check in the amount of \$_____.
3. General Authorization: Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.
4. CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1 hereinabove, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: U.S. Patent and Trademark Office Box Sequence, P.O. Box 2327 Arlington, VA 22202 on this 4 day of June, 2002.

Date: 6/4/02

By [Signature]

Emily Miao
Reg. No. 35,285

McDonnell Boehnen Hulbert & Berghoff
300 South Wacker Drive, 32nd Floor
Chicago, IL 60606
Telephone: (312) 913-0001
Fax: (312) 913-0002

#6



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RESPONSE TO NOTICE TO COMPLY

U.S. Patent and Trademark Office
Box Sequence, P.O. Box 2327
Arlington, VA 22202

Sir:

This is in response to the Notice to Comply mailed May 21, 2002. Attached is a paper copy of a substitute Sequence Listing and 3.5" diskette containing a computer readable copy of the Sequence Listing in accordance with 37 C.F.R. § 1.821(e). As requested by the Notice, Sections <220> - <223> have been inserted into SEQ ID NO. 57. In accordance with 37 C.F.R. §§ 1.821-1.825, the computer readable copy is identical to the paper copy filed with the disclosure of the application and the attached Sequence Listing. No new matter has been added to the application as a result of this submission.

Prompt consideration and entry of this response is respectfully requested.

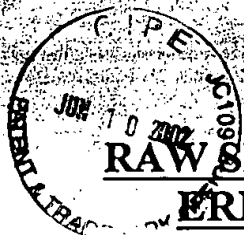
Date:

6/4/02

By:

Respectfully submitted,

Emily Miao
Reg. No. 35,285



BIOTECHNOLOGY
SYSTEMS
BRANCH



217

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/976,601
Source: 1656
Date Processed by STIC: 2/14/2002

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THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4212.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/976,601	10/12/2001	Chad A. Mirkin	00-713-i16

Emily Miao
McDonnell Boehnen Hulbert & Berghoff
32nd Floor
300 S. Wacker Drive
Chicago, IL 60606

CONFIRMATION NO. 4367
FORMALITIES LETTER
OC000000008158333

Date Mailed: 05/21/2002

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NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

*A copy of this notice **MUST** be returned with the reply.*

Customer Service Center
Initial Patent Examination Division (703) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY



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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/976,601

DATE: 02/14/2002
TIME: 15:49:51

Input Set : A:\00-713-il6seq list.txt
Output Set: N:\CRF3\02142002\I976601.raw

**Does Not Comply
Corrected Diskette Needed**

3 <110> APPLICANT: Mirkin, Chad A.
4 Letsinger, Robert L.
5 Mucic, Robert C.
6 Storhoff, James J.
7 Elghanian, Robert
8 Taton, Thomas A.
10 <120> TITLE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO
11 AND USES THEREFOR
13 <130> FILE REFERENCE: 00-713-il6
15 <140> CURRENT APPLICATION NUMBER: 09/976,601
16 <141> CURRENT FILING DATE: 2001-10-12
18 <150> PRIOR APPLICATION NUMBER: 09/603,830
19 <151> PRIOR FILING DATE: 2000-06-26
21 <150> PRIOR APPLICATION NUMBER: 09/344,667
22 <151> PRIOR FILING DATE: 1999-06-25
24 <150> PRIOR APPLICATION NUMBER: 09/240,755
25 <151> PRIOR FILING DATE: 1999-01-29
27 <150> PRIOR APPLICATION NUMBER: PCT/US97/12783
28 <151> PRIOR FILING DATE: 1997-07-21
30 <150> PRIOR APPLICATION NUMBER: 60/031,809
31 <151> PRIOR FILING DATE: 1996-07-29
33 <150> PRIOR APPLICATION NUMBER: 60/200,161
34 <151> PRIOR FILING DATE: 2000-04-26
36 <160> NUMBER OF SEQ ID NOS: 64
38 <170> SOFTWARE: Microsoft Word 2000

ERRORED SEQUENCES

763 <210> SEQ ID NO: 57
764 <211> LENGTH: 12
765 <212> TYPE: DNA
766 <213> ORGANISM: Anthrax
768 <400> SEQUENCE: 57
E--> 769 taacaatgat cc

12

"n" used see item # 9 on Error
Summary Sheet.



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JUN 18 2002

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1656

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/976,601

DATE: 02/14/2002
TIME: 15:49:51

Input Set : A:\00-713-i16seq list.txt
Output Set: N:\CRF3\02142002\I976601.raw

**Does Not Comply
Corrected Diskette Needed**

3 <110> APPLICANT: Mirkin, Chad A.
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5 Mucic, Robert C.
6 Storhoff, James J.
7 Elghanian, Robert
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765 <212> TYPE: DNA
766 <213> ORGANISM: Anthrax
768 <400> SEQUENCE: 57

E--> 769 taacaatgat cc

12

"n" used see item # 9 on Error
Summary SHEET.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/976,601

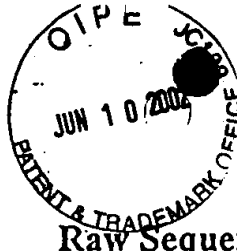
DATE: 02/14/2002

TIME: 15:49:52

Input Set : A:\00-713-il6seq list.txt

Output Set: N:\CRF3\02142002\I976601.raw

L:769 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:57



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Raw Sequence Listing Error Summary

ERROR DETECTED**SUGGESTED CORRECTION**SERIAL NUMBER: 09/976,601

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

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